

REMARKS/ARGUMENTS

Claims 1 to 3, 5, 6, 8, 10 and 12 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Nguyen et al. (US 6,983,232) in further view of Herman (US 2001/0034592). Claim 11 was rejected under 35 U.S.C. §103(a) as being unpatentable over Nguyen et al. in view of Herman and in further view of Nakano et al. (US 2003/0018542).

Claims 1 and 12 have been amended. Support is found in paragraph [0034], for example.

Reconsideration of the application based on the following remarks is respectfully requested.

35 U.S.C. 103 Rejections

Claims 1 to 3, 5, 6, 8, 10 and 12 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Nguyen et al. in further view of Herman.

Nguyen et al. describes a customer benefit tool which allows customer models to be validated under acceptance test conditions to ensure that the machine based processes and cycle times have been accurately modeled. (See col. 2; lines 51 to 54). A user proposes a configuration for an assembly line by selecting objects that represent assembly line equipment, the objects having specific values for operating characteristics. "The configuration and associated operating characteristic values are then used to build a discrete event simulation." (See col. 3; lines 9 to 10). To streamline the building of a simulation by selecting and arranging the simulation objects, templates may be created and values may be read into the template to create the simulation object." (Nguyen col. 3; lines 14 to 18). These simulation objects can also be formed using designer objects and templates. (See col. 5; line 56 to col. 6; line 1).

Herman discloses a flexographic printing simulator and diagnostic system use for training personnel. It "gives the user 'hands-on' experience in recognizing, analyzing measuring and correcting production problems within the printing process." (Paragraph [0006]).

Claim 1, as amended, recites a method for simulating process flows in the graphics industry and for displaying the result calculated in the simulated process flows and/or intermediate results, comprising the steps of:

inputting or selecting at least one order data set representing a print job via a user interface of a computer;

selecting process data sets representing machines via a graphical user interface, the

process data sets representing the machines being stored in a library, the print job determining minimum requirements to be met by a machine to be eligible as a process data set for a simulation and excluding machines that do not meet the requirements from the simulation;
distributing the at least one order data set among the selected process data sets;
calculating links between the order data set and the process data sets as a function of the order data set and the process data sets;
creating a process flow from the calculated links;
calculating results or intermediate results for the process flow using the order data set;
and
outputting the results or intermediate results on a display of the computer.

It is respectfully submitted that neither Nguyen et al. nor Herman discloses “the print job determining minimum requirements to be met by a machine to be eligible as a process data set for a simulation and excluding machines that do not meet the requirements from the simulation,” as now recited in claim 1. The method of Nguyen et al. merely involves a consultant or customer choosing a line configuration of designer objects, pieces of assembly line equipment, from a machine library, altering parameters of a designer object to create a simulation objects, running a test simulation on the simulation objects, and then comparing the test simulation to an acceptance testing. (See, e.g., Col. 11, Lines 9 to 28; Col. 15, Lines 31 to 40; Col. 2, Lines 42 to 58). Nguyen et al. does not indicate that there are minimum requirements to be met by a piece of equipment to be used in a test simulation or that a print job, or even an order data set, determines such minimum requirements. In Nguyen et al. a salesman or consultant merely selects pieces of equipment from a library of machine, no requirements or limitations are indicated as being placed on the selection.

It is also respectfully submitted that the selection and testing in Nguyen et al. is clearly not “the print job... excluding machines that do not meet the requirements from the simulation,” as now recited in claim 1. Nguyen et al. discloses that equipment is selected, parameters of the equipment are chosen and a simulation is run on the equipment, and then the equipment either fails or passes acceptance testing. (See Col. 2, Lines 42 to 62). There is no indication that any equipment is excluded from a test simulation. Also, because there is no indication in Nguyen et al. that there is more than one of each type of equipment, no piece of equipment could be excluded or preferred over another piece of equipment even if the equipment is seen as a failure.

The parameters of the designer object are simply altered until the piece of equipment is accepted. (Col. 11, Lines 29 to 45). Also, because Herman only discloses running a simulation on a single press, Herman does not disclose this limitation of claim 1.

Furthermore, it is respectfully submitted that neither Nguyen et al. nor Herman discloses or teaches “distributing the at least one order data set among the selected process data sets,” as recited in claim 1. The model disclosed in Nguyen et al. does not involve the distribution of at least one printing job, which claim 1 clearly defines as the at least one order data set, among machines. Also, in Nguyen et al., a user alters designer objects arranged as an assembly line into simulation objects to be used in a simulation, with inputs passing through all the simulation objects in the assembly line one by one during the simulation. (Col. 11, Lines 12 to 19). The inputs of the simulation are either run through all of the simulation objects in the assembly line or they are not run through any of the simulation objects. Inputs cannot be distributed among the simulation objects at certain areas of the assembly line. It is respectfully submitted that there is no support in Nguyen et al. that the wording “it can handle distributed input” in col. 2, lines 34 to 39 is the same as “distributing the at least one order data set among the selected process data sets,” as recited in claim 1. Additionally, Herman relates only to a simulation for training the staff on one printing press and thus does not address the problem of distributing print jobs among a plurality of machines in a print shop.

Moreover, it is respectfully submitted that it would not have been obvious to one of skill to have modified the an electronics assembly line modeling tool used to sell products or services as disclosed in Nguyen et al. with the teachings of Herman of a flexographic printing press simulator used to train press operators. In fact, although both show simulations of machinery, the types of machinery are completely distinct and used in the simulations much differently. A simulation for choosing components of machinery is much different that a simulation for actual use of machinery. Also, there is no indication in Nguyen et al. that there are problems with training operators of an electronics assembly line or that the method of simulation taught in Herman would be desired in the modeling tool of Nguyen et al.

Withdrawal of the rejection of claims 1 to 3, 5, 6, 8, 10 under 35 U.S.C. §103(a) is respectfully requested.

Claim 12, as amended, recites a device for simulating process flows in the graphics industry and for displaying the result calculated in the simulated process flows or intermediate results on a display device, comprising:

- at least one user interface for inputting or selecting at least one order data set representing a print job, the print job determining minimum requirements to be met by a machine to be eligible as a process data set for a simulation;

- at least one graphical user interface for selecting process data sets representing machines;

- at least one computer for excluding machines that do not meet the requirements of the print from the simulation and for distributing the at least one order data set among the selected process data sets and for calculating links between order data set and process data sets as a function of the order data set and the process data sets;

- the computer for creating a process flow from the calculated links;

- the computer for calculating the result or intermediate results for the process flow using the order data set; and

- a display for displaying the results or intermediate results.

For at least the reasons set forth above with regard to claim 1, Nguyen et al. or Herman fails to teach or show “the print job determining minimum requirements to be met by a machine to be eligible as a process data set for a simulation” and “at least one computer for excluding machines that do not meet the requirements of the print from the simulation and for distributing the at least one order data set among the selected process data sets,” as now recited in claim 12. Also, it would not have been obvious to one of skill in the art to have combined Nguyen et al. or Herman to meet the limitations of claim 12.

Withdrawal of the rejection of claim 12 under 35 U.S.C. §103(a) is respectfully requested.

Claim 11 was rejected under 35 U.S.C. §103(a) as being unpatentable over Nguyen et al. on view of Herman and in further view of Nakano et al. (US 2003/0018542).

Nguyen et al. is discussed above.

Herman is discussed above.

Nakano et al. is cited solely for its alleged disclosure of the additional limitation: “wherein the process data sets contain dimensions associated with graphics industry devices or the dimensions associated with the devices are displayed on a display device.” As such, it cannot


cure the deficiencies in Nguyen et al. and Herman outlined above.

Withdrawal of the rejection of claim 11 under 35 U.S.C. §103(a) is respectfully requested.

CONCLUSION

The present application is respectfully submitted as being in condition for allowance and applicants respectfully request such action.

Respectfully submitted,
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